Software for Viewing, Merging and Saving Movies

EOS MOVIE Utility for EOS-1D C

Ver. 1.0

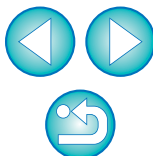
Instruction Manual

Content of this Instruction Manual

- EMU is used for EOS MOVIE Utility for EOS-1D C.
- ▸ indicates the selection procedure of the menu. (Example: [File] menu ▸ [Quit].)
- Square brackets are used to indicate items such as menu names, button names and window names that appear on the computer screen.
- Text inside < > indicates a key on the keyboard.
- ** indicates a reference page. Click to move to the relevant page.
- (!) : Marks information that should be read before use.
- Marks additional information you may find helpful.

Switching Between Pages

- Click on arrows on the bottom right of the screen.
  - : next page
  - : previous page
  - : return to a page you had previously displayed
- Click on the headings on the right side of the screen to switch to the contents page of that heading. Also, click the item you want to read about on the table of contents to move to the relevant page.

 CCS-M055EMUME-000

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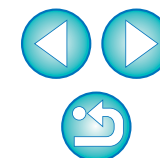

Introduction

EOS MOVIE Utility for EOS-1D C (hereinafter, “EMU”) is software for viewing, merging and saving movies shot on a CINEMA EOS camera EOS-1D C.

Main Features of EMU

With EMU, you can view movie files shot with an EOS-1D C. You can also use View Assist for viewing movies shot with Canon Log gamma. In addition, you can merge multiple 4 GB movie files created from one clip into a single file, and save it.

What is Canon Log gamma?

This function allows rich gradation expression from dark points to bright points, applying a wide dynamic range. It maximizes the excellent capability of CMOS sensor.

What is a movie clip?

A movie recorded in a single shooting operation is called a movie clip.

With this software, you cannot view movies shot on a camera other than the EOS-1D C.

System Requirements

OS	Mac OS X 10.7 Mac OS X 10.8
Computer	Macintosh with one of the above OS preinstalled
CPU	Core i7 2.93 GHz equivalent or more recommended
Graphics board	ATI Radeon HD 5870 equivalent or more recommended
RAM	Minimum 4 GB
Display	XGA (1024 x 768 pixels) or more

- When editing 4K movies with this software, using CF cards and CF card readers with the following specifications is recommended.
  - CF card: Supporting UDMA 7, 100 MB/sec. or higher effective writing/reading speed
  - CF card reader: USB 3.0 connection, supporting UDMA 7, 100 MB/sec. or higher effective reading speed

  For information related to operation verification of CF cards and CF card readers, refer to Canon Web site, etc.
- See the Canon Web site for support information including the latest OS.

Contents

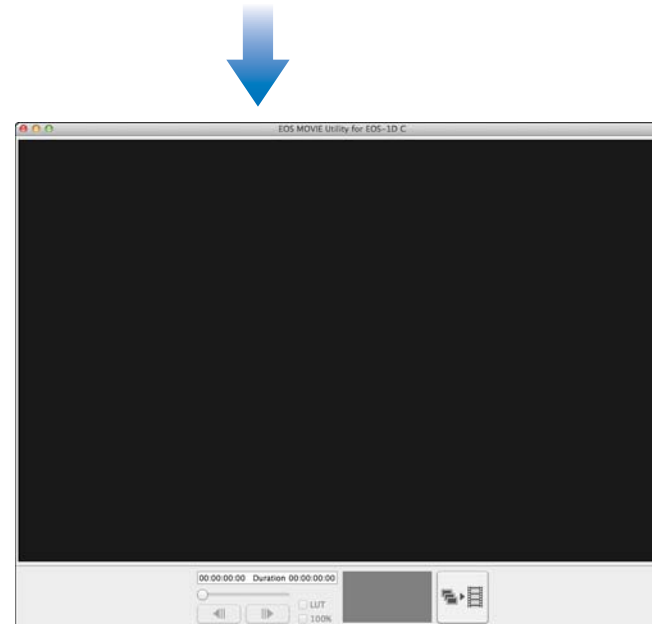
Installing the Software

When installing this software, an administrator-level privilege is required.

1. **Double-click the compressed EMU file (.gz format) downloaded from the Canon Web site to open it.**
2. **Double-click "emum-1-x-x-xxx-9l.dmg" in the folder.**
   ➜ The disk image "emum100" is mounted.
3. **Double-click the disk image "emum100", and double-click "EMUInstaller" in the displayed folder.**
4. **Follow onscreen instructions for installation.**

Starting up EMU

Click the shortcut in your desktop's Dock.

➜ EMU starts up and the main window appears.

Starting up several EMU at the same time is not possible.

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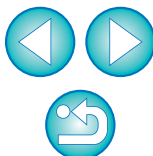
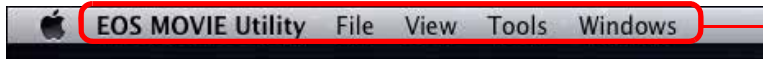
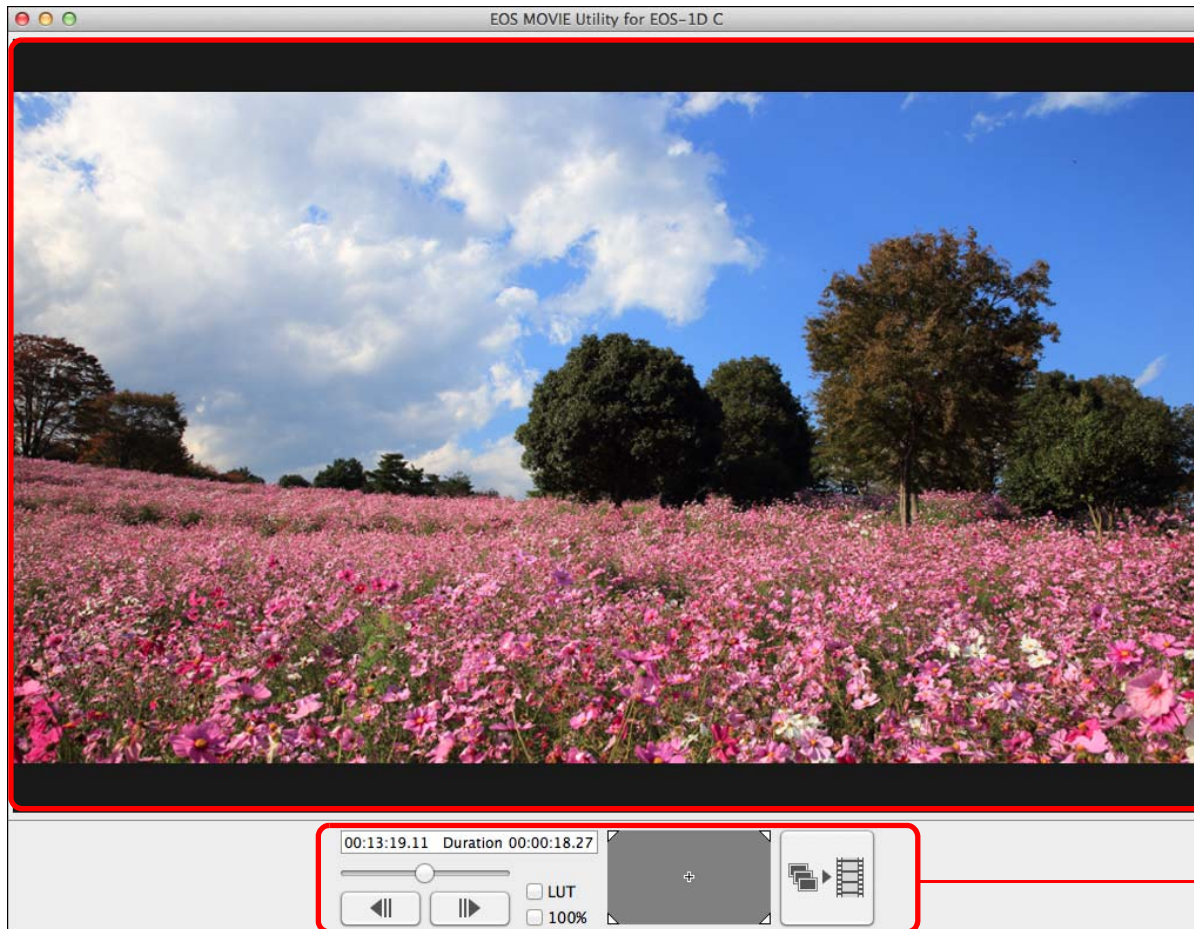
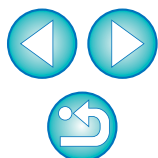

Basic Screen

Main Window

You can view movie clips, merge split movie files into a single file and save it, and perform other operations in the main window.

Menu
Menu to execute all functions.

Preview area
Displays a clip.

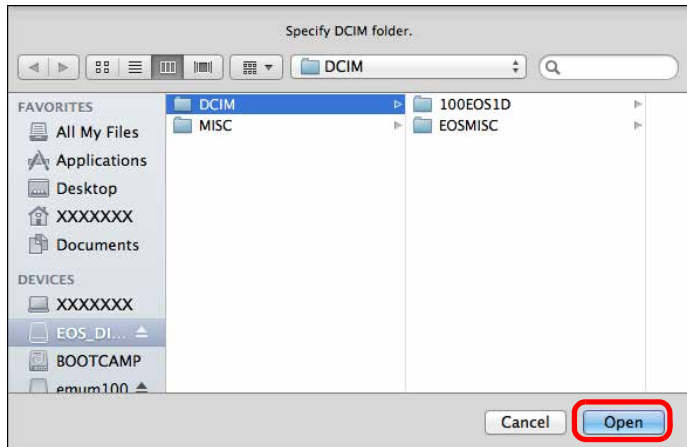
Control area
Controls for viewing movie clips and merging split movie files to be saved as a single file.

Viewing a Movie Clip

The method for viewing a movie clip is described here.
It is recommended that you first copy the folder where the movie clip is saved on the memory card to your computer with a card reader.

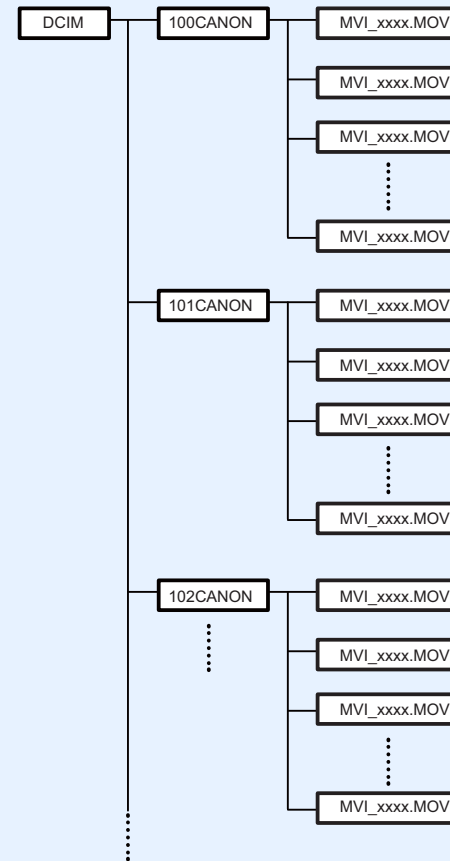
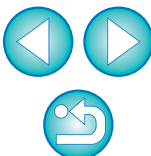
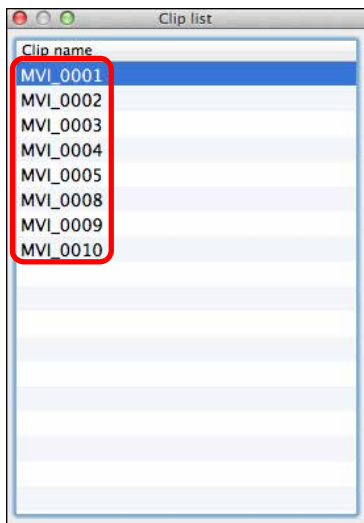
Movie Clip Viewing

1 In the main window, select the [File] menu ▶ [Open...].

➜ A dialog box for selecting a folder appears.

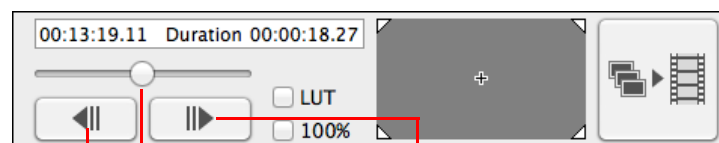
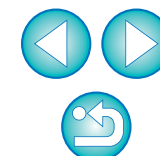
2 Select the folder where the movie clip to view is saved, and then click the [Open] button.

➜ The [Clip list] dialog box appears.

- After inserting the memory card in the card reader, you can also connect the reader to the computer to select folders on the memory card directly.
- You cannot connect the camera to the computer to directly select folders on the camera's memory card.

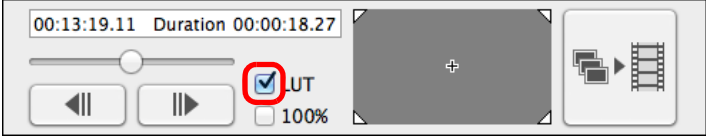
Movie files shot on a camera are recorded on the memory card with the folder structure shown below.

With this software, if the above folder structure is not maintained, it may not be possible to view the movie clips properly. When viewing movie clips, make sure the above folder structure is maintained and the DCIM folder at the upper layer of the folder structure is selected. Even when the folder structure is maintained, be aware that it may not be possible to view the clips properly if the name of the selected folder, originally [DCIM], has been changed to another name.

3 Select the movie clip to be viewed in the [Clip list] dialog box.

➜The image of the movie clip appears in the main window.

- In the [Clip list] dialog box, you can switch between movie clips with the <↑><↓> keys on the keyboard or by clicking the mouse.
- Even if you close the [Clip list] dialog box, the content of the list is saved. If you select [Clip list...] from the [View] menu, the [Clip list] reappears.

Moving the Movie Clip Display Position

You can move the display position of the movie clip by dragging the frame position slider left or right, or by clicking the previous frame button or next frame button.

Viewing a Movie Shot with Canon Log Gamma

If you view a movie that was shot with Canon Log gamma (p.2) as it is, image will look dark and with a low contrast. If you apply a look-up table (LUT) and view the clip, you can check the clip with an image close to normal display.

1 Checkmark the [LUT] checkbox.

- If the movie was shot without Canon Log gamma, you cannot checkmark the [LUT] checkbox.

2 View the selected movie.

- Perform the operations described in “Movie Clip Viewing” (p.6).

→ The LUT is applied and the movie is displayed.

- You can check or uncheck the LUT checkbox with the <B> key on the keyboard.
- For movies shot with Canon Log gamma, [On] is displayed for the [Canon Log] item in the shooting information (p.10).

Viewing in Full Screen

1 Display a movie.

- Follow operations in “Movie Clip Viewing” (p.6).

2 In the main window, select the [View] menu ▶ [Full Screen].

→ The movie viewed is displayed in full screen.

- You can also double-click the preview area to display the movie in full screen.
- To cancel full screen display, press the <Esc> key or double-click the preview area.

Operations Using Keyboard

You can use the keyboard for the following operations.

Keyboard	Operation
<←>	Previous frame
<→>	Next frame
<Home>	Move to first frame
<End>	Move to last frame
<B>	Enable/disable look-up table (LUT)
<D>	Displays [Merge Files] dialog box
<F>	Switches to full screen display
<V>	Switch display mode ([100% view]/[Fit to window])

Switching the Movie Display Size

You can apply either of [Fit to window] mode and [100% view] mode as a method for displaying a movie in the preview area.

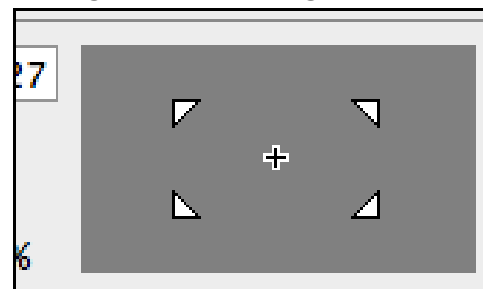
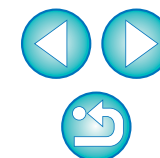
Select the [View] menu ▶ [Fit to window]/[100% view].

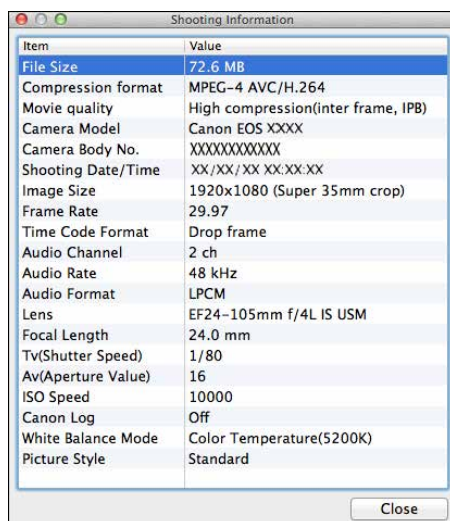
➜The image is displayed in the preview area with the selected display mode.

[Fit to window] mode

[100% view] mode

- In [Fit to window] mode, the image is displayed completely within the preview area.
- In [100% view] mode, the image is enlarged to 100% (actual pixel size) and displayed in the preview area.
- Checkmark the [100%] checkbox in the control area to view in [100% view] mode. Remove the checkmark from the [100%] checkbox to view in [Fit to window] mode.
- To change the display position of an image in [100% view] mode, drag the image in the preview area.

Enlarged position in guide area

Confirming the Movie File Information

You can display and confirm shooting information for movie clips.

1 In the main window, select the [View] menu ▶ [Clip list...].

➜The [Clip list] dialog box appears.

- Note that this function is available after you select a folder in which the movie files to be confirmed are saved. If no folder is selected, follow steps 1 to 2 in “Movie Clip Viewing” (p.6) to select a folder.

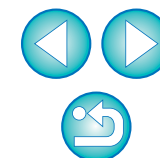
2 In the [Clip list] dialog box, select a movie clip to display its shooting information.

3 In the main window, select the [View] menu ▶ [Shooting Information...].

➜The shooting information is displayed in the [Shooting Information] window.

Shooting Information

Item	Value
File Size	72.6 MB
Compression format	MPEG-4 AVC/H.264
Movie quality	High compression(inter frame, IPB)
Camera Model	Canon EOS XXXX
Camera Body No.	XXXXXXXXXXX
Shooting Date/Time	XX/XX/XX XX:XX:XX
Image Size	1920x1080 (Super 35mm crop)
Frame Rate	29.97
Time Code Format	Drop frame
Audio Channel	2 ch
Audio Rate	48 kHz
Audio Format	LPCM
Lens	EF24-105mm f/4L IS USM
Focal Length	24.0 mm
Tv(Shutter Speed)	1/80
Av(Aperture Value)	16
ISO Speed	10000
Canon Log	Off
White Balance Mode	Color Temperature(5200K)
Picture Style	Standard

Close

Merging and Saving Movie Files

When you shoot movies with the EOS-1D C, the movie file will be split by 4 GB and multiple movie files will be created automatically, even for the single shooting. You can merge these multiple files and save them as a single file with this function.

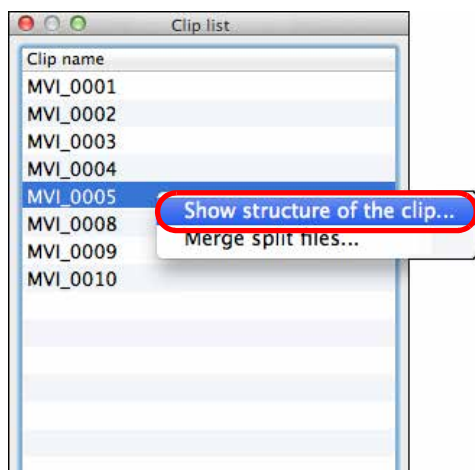
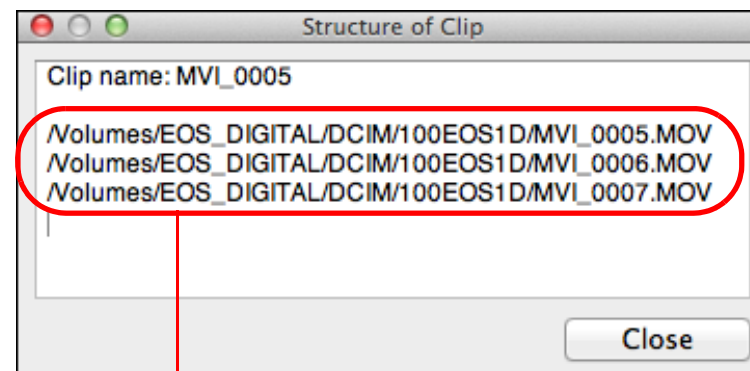
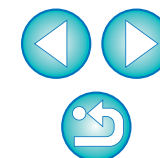
Checking the Movie Files in a Movie Clip

In EMU, the split movie files will be displayed as a single movie clip. You can check the structure of a movie clip and see the movie files that consist the movie clip in the procedures as below.

1 In the main window, select the [View] menu ▶ [Clip list...].

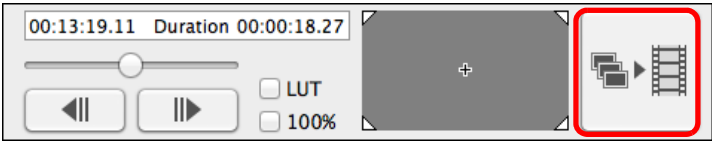
➜ The [Clip list] dialog box appears.

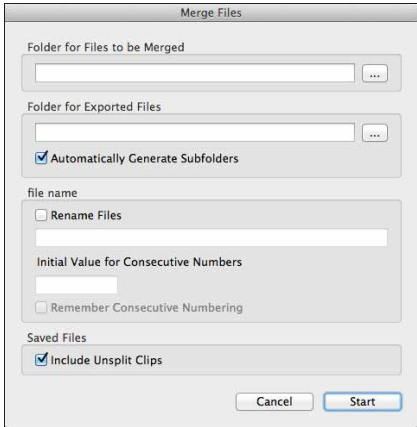
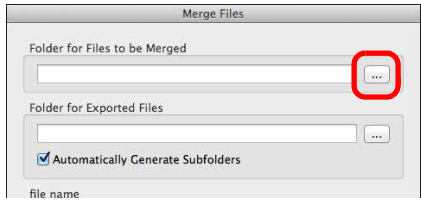
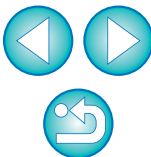
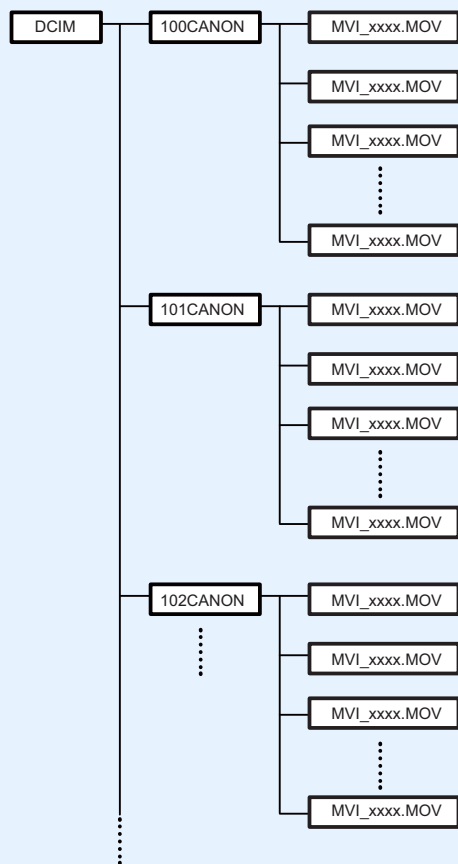
● To use this function, you must first select the folder in which the movie clips to check are saved. If a folder is not selected, follow steps 1 to 2 of "Movie Clip Viewing" (p.6) to select a folder.

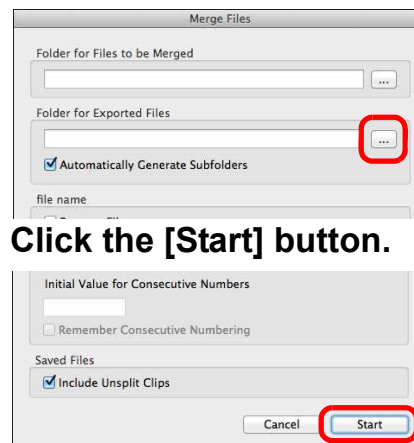
2 In the [Clip list] dialog box, select the movie clip whose structure you want to check, then click while holding down the <control> key, and select [Show structure of the clip...] from the menu that appears.

➜ The [Structure of Clip] dialog box appears.

Movie file names are displayed in several lines for a movie clip made up of split movie files.

Merging Split Movie Files and Saving as a Single File

You can merge multiple split movie files in a movie clip and save them as a single file. The original movie files are kept as they are in the folder they were originally saved.

Merging All the Split Movie Files in the Folder and Saving as a Single File

1 Click the merge file button in the main window.

→ The [Merge Files] dialog box appears.

- In the main window, you can also select the [Tools] menu ▶ [Merge split files...] to display the [Merge Files] dialog box.

2 Click the [...] button for [Folder for Files to be Merged] and then select the folder in which the movie files to be merged are saved.

- All the movie files saved in the selected folder will be merged.

Movie files shot on a camera are recorded on the memory card with the folder structure shown below.

With this software, if the above folder structure is not maintained, it may not be possible to merge the split movie files properly. When performing "Merge all the split movie files in the folder and save as a single file" operation, make sure the above folder structure is maintained and the DCIM folder at the upper layer of the folder structure is selected. Even when the folder structure is maintained, be aware that it may not be possible to merge the movie files properly if the name of the selected folder, originally [DCIM], has been changed to another name.

3 **Click the [...] button for [Folder for Exported Files] and then select the folder for saving the merged movie file.**

4 **Click the [Start] button.**

→ Merging and saving starts.

- A message appears when merging and saving are complete.

- If you checkmark [Automatically Generate Subfolders], a subfolder is created in the folder for the merged movie file selected in step 3, then the merged movie file is saved there. A file can be saved without changing its file name even if another file with the same file name is already in the folder.
- If you checkmark [Rename Files], you can change the file name of the merged movie file when saving it.
- To create file names with consecutive numbering, enter the initial value in the [Initial Value for Consecutive Numbers] box. You can enter an initial value that is up to 5 digits. Checkmark [Remember Consecutive Numbering] to allow consecutive numbering to continue even after closing the [Merge Files] dialog box and opening it again to merge and save movie files.
- If you checkmark [Include Unsplit Clips], movie files not split but saved in the folder selected in step 2 are copied to the folder for saving the merged file together.

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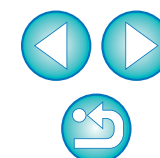

Merging Split Movie Files for a Single Movie Clip and Saving as a Single File

1 **In the main window, select the [View] menu ▶ [Clip list...].**

➜ The [Clip list] dialog box appears.

- Note that this function is available after you select a folder in which the movie files to be merged are saved. If no folder is selected, follow steps 1 to 2 of "Movie Clip Viewing" (p.6) to select a folder.

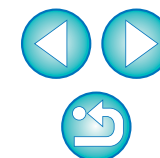
2 **In the [Clip list] dialog box, select the movie clip to be merged, then click while holding down the <control> key, and select [Merge split files...] from the menu that appears.**

➜ The [Merge Files] dialog box appears.

3 **Click the [...] button for [Folder for Exported Files] and then select the folder for saving the merged movie file.**

4 **Click the [Start] button.**

➜ Merging and saving starts.

- A message appears when merging and saving are complete.

Quitting EMU

In the main window, select the [EOS MOVIE Utility for EOS-1D C] menu ▶ [Quit EOS MOVIE Utility].

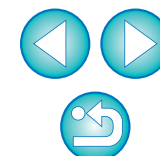
➜EMU quits.

Reference

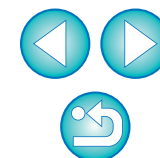
Troubleshooting

If EMU is not operating correctly, refer to the information below.

EMU does not work

- Starting up several EMU at the same time is not possible.
- Even if your computer has the RAM capacity (memory) described in the system requirements (p.2), if other applications are running at the same time as EMU, you may not have sufficient RAM (memory). Quit applications other than EMU.

Error Messages

If an error message appears, refer to the information below.

Message	Cause and solution
Cannot create a folder at the selected destination.	The memory card specified for the save destination is write-protected. Insert a writable memory card.
Please enter consecutive numbers.	No consecutive numbering is entered. Enter an initial value for consecutive numbering when there are several movie clips with movie files to be merged.
The size of the file you are saving is not supported on the destination file system.	The file system specified for the save destination does not support the size of the file being saved. Change the save destination.
Sufficient consecutive numbers are not provided for the files.	Consecutive numbering for file names exceeds 99999. Change the value entered for numbering or the file save destination.
EOS MOVIE Utility has already started by other user.	Log into the user account in Macintosh in which EOS MOVIE Utility is running, quit EOS MOVIE Utility, and start it up again.
4 GB or larger files may not be supported on the file system of output destination. Do you want to continue?	The merged movie file may not be saved to the drive where the save destination folder is located. Check that the file system specified for the save destination drive supports files of 4 GB or larger.
Could not merge because there was not enough available space.	There is insufficient space on the drive where the save destination folder is located. Create enough space or change the save destination, and then repeat the merge process.
The merge process has been failed.	Check that there is a save destination folder. If the save destination folder is on an external storage device, check that it is connected to the computer correctly.

Uninstalling the Software

- Quit any applications before uninstalling the software.
- Log into the account used when installation was performed.
- When you have moved the folders and the software to be deleted to the Trash, select the [Finder] menu ▶ [Empty Trash...] and empty the Trash. You cannot reinstall the software until you have emptied the Trash.

1 Display the folder in which the software is saved.

- Open the [Canon Utilities] folder.

2 Drag the folder for the software to be uninstalled to the Trash.

3 Select [Finder] menu on the desktop ▶ [Empty Trash...].

➜The software is deleted.

- When uninstallation ends, restart your computer.

> You cannot retrieve deleted data once you have emptied the Trash, so be particularly careful when deleting data.

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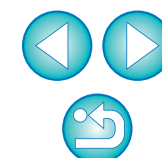
About This Instruction Manual

- It is prohibited to reproduce, in whole or part, the contents of this Instruction Manual without permission.
- Canon may change without notice the software specifications and contents of this Instruction Manual.
- The software screens and displays printed in this Instruction Manual may differ slightly from the actual software.
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- Please note that irrespective of the above-mentioned, Canon does not take responsibility for the outcome of the operation of the software.

Trademark Acknowledgments